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Applicants: Peter M. Glazer

AUG 09 2002

Serial No.: 09/978,333

Art Unit: 1655

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Filed: October 15, 2001

Examiner: Not Yet Assigned

For: *TRIPLE-HELIX FORMING OLIGONUCLEOTIDES FOR TARGETED
MUTAGENESIS*

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicant submits an Information Disclosure Statement, including seven (7) pages of Form PTO-1449 and a copy of each document cited therein.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-1868.

U.S. Patents

<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
5,962,426	10-05-1999	Glazer	514/44
5,422,251	06-06-1995	Fresco	435/91.1

Foreign Documents

<u>Number</u>	<u>Publication Date</u>	<u>Patentee</u>	<u>Country</u>
WO 95/01364	01/12/1995	Yale University	PCT

Publications

BAUMANN, et al., "Role of the human RAD51 protein in homologous recombination and double-stranded-break repair," *Trends Biochem Sci* 23(7):247-251 (1998).

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CHAN, et al., "Targeted correction of an episomal gene in mammalian cells by a short DNA fragment tethered to a triplex-forming oligonucleotide," *J. Biol. Chem.* 274(17): 11541-11548 (1999).

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MYHR, "Validation studies with Muta Mouse: a transgenic mouse model for detecting mutations in vivo," *Environ. Mol. Mutagen* 18:308-315(1991).

NARAYANAN, *et al.*, "Elevated levels of mutation in multiple tissues of mice deficient in the DNA mismatch repair gene Pms2," *Proc. Natl. Acad. Sci. USA* 94:3122-3127 (1997).

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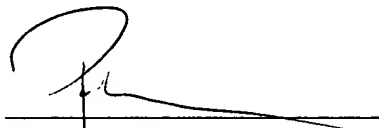
WOOD, *et al.*, "Complementation of the xeroderma pigmentosum DNA repair defect in cell-free extracts," *Cell* 53:97-106 (1988).

YOUNG, *et al.*, "Triple helix formation inhibits transcription elongation in vitro," *Proc. Natl. Acad. Sci. USA* 88:10023-10026 (1991).

Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, applicant invites the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicant is of the opinion that his claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,



Patrea L. Pabst
Reg. No. 31,284

Dated: July 31, 2002

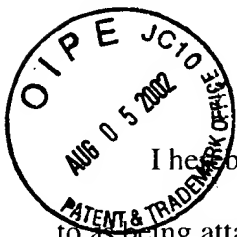
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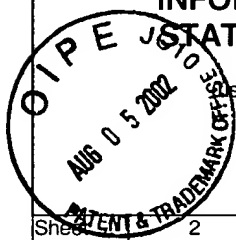


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		Filing Date	October 15, 2001
		First Named Inventor	Peter M. Glazer
		Group Art Unit	1655
		Examiner Name	
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		BAUMANN, et al., "Role of the human RAD51 protein in homologous recombination and double-stranded-break repair," <i>Trends Biochem Sci</i> 23(7):247-251 (1998).	
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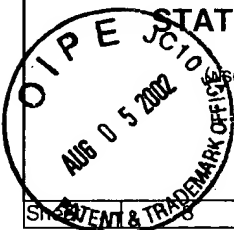


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		DUVAL-VALENTIN, et al., "Specific inhibition of transcription by triple helix-forming oligonucleotides," <i>Proc. Natl. Acad. Sci. USA</i> 89:504-508 (1992).	
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		MYHR, "Validation studies with Muta Mouse: a transgenic mouse model for detecting mutations in vivo," <i>Environ. Mol. Mutagen</i> 18:308-315(1991).	✓
		NARAYANAN, et al., "Elevated levels of mutation in multiple tissues of mice deficient in the DNA mismatch repair gene Pms2," <i>Proc. Natl. Acad. Sci. USA</i> 94:3122-3127 (1997).	✓
		ORSON, et al., "Oligonucleotide inhibition of IL2R alpha mRNA transcription by promoter region collinear triplex formation in lymphocytes," <i>Nucleic Acids Res.</i> 19:3435-3441 (1991).	✓
✓		PARK, et al., "Formation of a ternary complex by human XPA, ERCC1, and ERCC4(XPF) excision repair proteins," <i>Proc. Natl. Acad. Sci. USA</i> 91:5017-5021 (1994).	✓
✓		PARRIS, et al., "Proximal and distal effects of sequence context on ultraviolet mutational hotspots in a shuttle vector replicated in xeroderma cells," <i>J Mol Biol.</i> 236:491-502 (1994).	✓
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		PERROUALT, et al., "Sequence-specific artificial photo-induced endonucleases based on triple helix-forming oligonucleotides," <i>Nature</i> 344:358-360 (1990).	✓
		POSTEL, et al., "Evidence that a triplex-forming oligodeoxyribonucleotide binds to the c-myc promoter in HeLa cells, thereby reducing c-myc mRNA levels," <i>Proc. Natl. Acad. Sci. USA</i> 88:8227-8231 (1991).	✓
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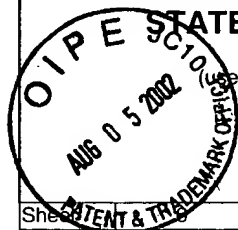
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 09/978,333
Filing Date October 15, 2001
First Named Inventor Peter M. Glazer
Group Art Unit 1655
Examiner Name
Attorney Docket Number YU 132 (OCR 653)

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		PRASEUTH, <i>et al.</i> , "Sequence-specific binding and photocrosslinking of alpha and beta oligodeoxynucleotides to the major groove of DNA via triple-helix formation," <i>Proc. Natl. Acad. Sci. USA</i> 85:1349-1353 (1988).	
		REARDON, <i>et al.</i> , "Removal of psoralen monoadducts and crosslinks by human cell free extracts," <i>Nucleic Acids Res.</i> 19:4623-4629 (1991).	
		SAMBROOK, <i>et al.</i> , MOLECULAR CLONING: A LABORATORY MANUAL, second edition, Cold Spring Harbor Laboratory Press, New York (1990).	
		SANCAR, "DNA excision repair," <i>Annu. Rev. Biochem.</i> 65:43-81 (1996).	
		SHIVJI, <i>et al.</i> , "Proliferating cell nuclear antigen is required for DNA excision repair," <i>Cell</i> 69: 367-374 (1992).	
		SIBGHAT-ULLAH, <i>et al.</i> , "Human nucleotide excision repair in vitro: repair of pyrimidine dimers, psoralen and cisplatin adducts by HeLa cell-free extract," <i>Nucleic Acids Res.</i> 17:4471-4484 (1989).	
		STROBEL, <i>et al.</i> , "Site-specific cleavage of human chromosome 4 mediated by triple-helix formation," <i>Science</i> 254:1639-1642 (1991).	
		SUNG, <i>et al.</i> , "Recombination factors of <i>Saccharomyces cerevisiae</i> ," <i>Mutat Res</i> 451:257-75 (2000).	
		TAKASUGI, <i>et al.</i> , "Sequence-specific photo-induced cross-linking of the two strands of double-helical DNA by a psoralen covalently linked to a triple helix-forming oligonucleotide," <i>Proc. Natl. Acad. Sci. USA</i> 88:5602-5606 (1991).	
		THACKER, "A surfeit of RAD51-like genes?," <i>Trends Genet</i> 15(5):166-8 (1999).	

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First Named Inventor	Peter M. Glazer
Group Art Unit	1655
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		VASQUEZ, <i>et al.</i> , "Chromosomal mutations induced by triplex-forming oligonucleotides in mammalian cells," <i>Nucleic Acids Res.</i> 27:1176-1181 (1999).	
		WANG, <i>et al.</i> , "Mutagenesis in mammalian cells induced by triple helix formation and transcription-coupled repair," <i>Science</i> 271: 802-805 (1996).	
		WANG, <i>et al.</i> , "Targeted mutagenesis in mammalian cells mediated by intracellular triple helix formation," <i>Mol. Cell. Biol.</i> 15:1759-1768 (1995).	
		WOOD, <i>et al.</i> , "Complementation of the xeroderma pigmentosum DNA repair defect in cell-free extracts," <i>Cell</i> 53:97-106 (1988).	
		YOUNG, <i>et al.</i> , "Triple helix formation inhibits transcription elongation in vitro," <i>Proc. Natl. Acad. Sci. USA</i> 88:10023-10026 (1991).	

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